



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,486	10/17/2003	Jock D. Mackinlay	131754	7949
27074	7590	08/13/2007		
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LONG, ANDREA NATAE	
			ART UNIT 2176	PAPER NUMBER
			NOTIFICATION DATE 08/13/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27074@oliff.com  
jarmstrong@oliff.com

## Office Action Summary

Application No.

10/687,486

Applicant(s)

MACKINLAY ET AL.

Examiner

Andrea N. Long

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-19,21-37 and 39-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-19, 21-37, and 39-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/21/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Applicant's Response*

1. Claims 2, 20 and 38 were cancelled. Claims 1, 12, 19, 30, 37, 39, and 40 were amended. Claims 41-47 were added. The objections to the Specification and Abstract are withdrawn due to the amendments. The rejection of claim 38 under 35 U.S.C. 101 is moot.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 3-5, 10, 12-18, 37, 39-42, and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Excel (User's Guide Microsoft Excel, Version 5.0 1993), hereinafter "Excel".**

**As to independent claims 1 and 37, Excel teaches *a method of shifting attention* (page 666, Excel teaches using an auditing function "Tracers" to draw attention quickly to cells) comprising the steps of:**

*determining the location for a focus of attention* (page 669, Excel teaches selecting a cell to become active);

*determining a display event* (pages 667-668, Excel teaches using tracer arrows to connect related cells, which shows the flow of data from one cell to another);

*determining the location of the display event* (page 668, Excel teaches displaying tracer arrows within a worksheet); and

*determining an attention shifting display element based on the display event, the determined location of the display event and the focus of attention* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents); and

*determining a distance between the focus of attention and the display event* (page 669 – 671, Fig. 4, Excel teaches determining the distance “length of the tracer arrow”, from beginning active cell to the point of the arrow);

*wherein the attention shifting display element is determined based on the determined distance, such that different types of attention shifting display elements are determined for different distances* (page 669, Excel teaches displaying different tracer arrows depending on the tracer type).

**As to dependent claim 3**, Excel teaches wherein the *focus of attention is determined based on monitoring user actions* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 4**, Excel teaches wherein *user actions are monitored based on a user selection tracking* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 5**, Excel teaches wherein the *display event is associated with animated information* (page 668, Excel teaches tracer arrows are drawn to draw attention to different cells).

**As to dependent claim 10**, Excel teaches *determining a combination attention shifting display element based on a display event located more than a threshold distance from the focus of attention* (page 671, Figure 4, Excel teaches having the focus of attention having a combination of active cells to produce attention shifting display element (formula) from the multiple distances of each cell).

**As to independent claims 12, 39, and 40**, Excel teaches a method of *determining an attention shifting display element* (page 666, Excel teaches using an auditing function “Tracers” to draw attention quickly to cells) comprising the steps of:

*determining a focus of attention* (page 669, Excel teaches selecting a cell to become active);

*determining a location of a display event* (page 668, Excel teaches displaying tracer arrows within a worksheet);

*determining an attention directing portion of an attention shifting display element based on a distance between the focus of attention and the location of the display event, such that different types of attention shifting display elements are determined for different distances* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents, further Excel teaches having different tracers which are visually distinctive).

**As to dependent claim 13**, Excel teaches *determining an attention attracting portion of an attention shifting display element based on the distance between the location of the display event and the location of the focus of attention* (page 668 –671, Fig. 4, Excel teaches determining the distance “length of the tracer arrow”, from beginning active cell to the point of the arrow, using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 14**, Excel teaches *determining at least one information portion within the focus of attention, associated with the attention shifting display element, and where the information portion displays information associated with the display event* (page 668, Excel teaches the active cell having tracer arrows to draw the flow of data which is associated with a formula).

**As to dependent claim 15**, Excel teaches *where the information portion is a mathematical operator and a symbolic operator* (page 671, Fig 4 “formula”).

**As to dependent claim 16**, Excel teaches *where the attention shifting display element is dynamically determined based on continued focus of attention on a display region* (page 671, Fig 4, Excel teaches that based on the active cell with the worksheet a tracer can show association between the active cell and its associated formula.

**As to dependent claim 17**, Excel teaches *where the continued focus of attention is determined based on user monitoring* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 18**, Excel teaches *where the attention shifting display element is dynamically determined based on continued focus of attention on the display event and wherein the display event is based on a mouse event* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 41**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 42**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 45**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 46**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 47**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).



*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 19, 21-23, 28, 30-36, and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Excel (User's Guide Microsoft Excel, Version 5.0 1993), hereinafter "Excel".**

**As to independent claim 19**, Excel teaches *a system of shifting attention* (page 666, Excel teaches using an auditing function "Tracers" to draw attention quickly to cells) *comprising: receiving a display event information* (page 669, user selection of cells), *determining a focus of attention* (page 669, Excel teaches selecting a cell to become active), *determining the location of the display event* (page 668, Excel teaches displaying tracer arrows within a worksheet), *determining an attention shifting display element based on the display event information, the location of the display event and the location of the focus of attention* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents), and *determining a distance between the focus of attention and the display event* (page 669 –671, Fig. 4, Excel teaches determining the distance "length of the tracer arrow", from beginning active cell to the point of the arrow); *wherein the attention*

Art Unit: 2176

*shifting display element is determined based on the determined distance, such that different types of attention shifting display elements are determined for different distances* (page 669, Excel teaches displaying different tracer arrows depending on the tracer type). While Excel does not explicitly state *an input/output circuit, a memory, a processor, and circuits*, it is well known and reasonably understood that Excel was created to run and be executed on a computer system. It is also well known that most computer systems contain input/output circuits, some type of memory (cache, RAM, ROM), a processor, and circuits.

It would have been obvious to one skilled in the art at the time the invention was to have used a computer systems that contain input/output circuits, some type of memory (cache, RAM, ROM), a processor, and circuits with to allow for implementation of the above determining functions.

**As to dependent claim 21**, Excel teaches wherein the *focus of attention is determined based on monitoring user actions* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 22**, Excel teaches wherein *user actions are monitored based on a user selection tracking* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 23**, Excel teaches wherein the *display event is associated with animated information* (page 668, Excel teaches tracer arrows are drawn to draw attention to different cells).

**As to dependent claim 28**, Excel teaches *determining a combination attention shifting display element based on a display event located more than a threshold distance from the focus of attention* (page 671, Figure 4, Excel teaches having the focus of attention having a combination of active cells to produce attention shifting display element (formula) from the multiple distances of each cell).

**As to independent claim 30**, Excel teaches *a system of determining an attention shifting display element* (page 666, Excel teaches using an auditing function “Tracers” to draw attention quickly to cells), *which determines the focus of attention* (page 669, Excel teaches selecting a cell to become active), *determines the location of the display event* (page 668, Excel teaches displaying tracer arrows within a worksheet), and *determines an attention directing portion of an attention shifting display event based on a distance between the focus of attention and the location of the display event, such that different types of attention shifting display elements are determined for different distances* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents). While Excel does not explicitly state circuits to perform these tasks, it is well known and reasonably understood that Excel was created to run and be executed on a computer system. It is also well know that most computer systems contain circuits.

It would have been obvious to one skilled in the art at the time the invention was to have used a computer systems that contain circuits to allow for implementation of the above determining functions.

**As to dependent claim 31**, Excel teaches *determining an attention attracting portion of an attention shifting display element based on the distance between the location of the display event and the location of the focus of attention* (page 668 –671, Fig. 4, Excel teaches determining the distance “length of the tracer arrow”, from beginning active cell to the point of the arrow, using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 32**, Excel teaches *determining at least one information portion within the focus of attention, associated with the attention shifting display element, and where the information portion displays information associated with the display event* (page 668, Excel teaches the active cell having tracer arrows to draw the flow of data which is associated with a formula).

**As to dependent claim 33**, Excel teaches *where the information portion is a mathematical operator and a symbolic operator* (page 671, Fig 4 “formula”).

**As to dependent claim 34**, Excel teaches *where the attention shifting display element is dynamically determined based on continued focus of attention on a display region* (page 671,

Fig 4, Excel teaches that based on the active cell with the worksheet a tracer can show association between the active cell and its associated formula.

**As to dependent claim 35**, Excel teaches *where the continued focus of attention is determined based on user monitoring* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 36**, Excel teaches *where the attention shifting display element is dynamically determined based on continued focus of attention on the display event and wherein the display event is based on a mouse event* (pages 669-670, Excel teaches clicking on cells to activate them).

**As to dependent claim 43**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

**As to dependent claim 44**, Excel teaches *wherein the attention shifting display element is determined based on the location of the display event and the determined distance* (page 668-671, Excel teaches using the tracer arrows to trace the flow of data from one cell to another within a worksheet).

6. **Claims 7, 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel further in view of Jonathan Grudin (Partitioning Digital Worlds: Focal and Peripheral Awareness in Multiple Monitor Use, 2001), hereinafter “Grudin”.**

As to dependent claim 7, Excel teaches the *distance between the focus of attention and display event*. However, Excel does not teach *wherein the distance between the focus of attention and display event includes at least one non-sensible portion*. Grudin teaches including a non-sensible portion (page 460 1<sup>st</sup> paragraph). Grudin teaches that it is well known that multiple displays do not connect seamlessly.

It would have been obvious to one skilled in the art at the time the invention was made to have inferred that if multiple monitors were in use the display of information would contain at least one seam.

As to dependent claim 9, Excel teaches *determining the attention shifting display element* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents). Excel also teaches a *dynamic attention shifting display element* (page 668, the active cell) and a *static shifting display element* (page 668, the resulting formula). However, Excel does not teach *determining a dynamic attention shifting display element based on a display event located at the periphery of attention and determining a static attention shifting display element based on a display event located at the focus of*

*attention*. Grudin teaches using one monitor for focal attention and the second monitor for periphery awareness (page 464, 2<sup>nd</sup> column 2<sup>nd</sup> paragraph).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the attention shifting of Excel with the focal and periphery attention of Grudin to maximize the use and capabilities of a spreadsheet and to increase the opportunity to design suites of awareness and notification features that draw on the full range of communication and agent software that a person selects.

**7. Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Excel (User's Guide Microsoft Excel, Version 5.0 1993), hereinafter "Excel" in further view of Jonathan Grudin (Partitioning Digital Worlds: Focal and Peripheral Awareness in Multiple Monitor Use, 2001), hereinafter "Grudin".**

**As to dependent claim 25**, Excel teaches the *distance between the focus of attention and display event*. However, Excel does not teach *wherein the distance between the focus of attention and display event includes at least one non-sensible portion*. Grudin teaches including a non-sensible portion (page 460 1<sup>st</sup> paragraph). Grudin teaches that it is well known that multiple displays do not connect seamlessly.

It would have been obvious to one skilled in the art at the time the invention was made to have inferred that if multiple monitors were in use the display of information would contain at least one seam.

**As to dependent claim 27**, Excel teaches *determining the attention shifting display element* (pages 668-669, Figures 1 and 2, Excel teaches displaying tracer arrows to show the flow of data into a formula, based on the starting active cell within a worksheet, and the users choice of tracing precedents or dependents). Excel also teaches a *dynamic attention shifting display element* (page 668, the active cell) *and a static shifting display element* (page 668, the resulting formula). However, Excel does not teach *determining a dynamic attention shifting display element based on a display event located at the periphery of attention and determining a static attention shifting display element based on a display event located at the focus of attention*. Grudin teaches using one monitor for focal attention and the second monitor for periphery awareness (page 464, 2<sup>nd</sup> column 2<sup>nd</sup> paragraph).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the attention shifting of Excel with the focal and periphery attention of Grudin to maximize the use and capabilities of a spreadsheet and to increase the opportunity to design suites of awareness and notification features that draw on the full range of communication and agent software that a person selects.



8. **Claims 6, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as modified by Grudin further in view of Tan et al. (Effects of Visual Separation and Physical Discontinuities when Distributing Information across Multiple Displays, 2003, *motivational purposes only*), hereinafter “Tan”.**

As to **dependent claim 6**, Excel teaches *a focus of attention* (page 669, Excel teaches selecting a cell to become active) and *a display event* (pages 667-668, Excel teaches using tracer arrows to connect related cells, which shows the flow of data from one cell to another). However, Excel does not teach wherein *the focus of attention is located on a first display and the display event is located on a second display*. Grudin teaches using multiple integrated displays to present information (page 459 “Dual or multiple monitors”).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the display event and focus of attention of Excel with the multiple displays of Grudin to allow the system to present information across much wider visual angles than before and to provide abundant display space as disclosed by Tan (page 1 “Introduction”).

As to **dependent claim 8**, Excel as modified by Grudin in further view of Tan teaches wherein *the distance between the focus of attention and the display event are displayed on multiple screens*. Grudin further teaches one *non-sensible portion*.

As to **dependent claim 11**, Excel teaches *a focus of attention* (page 669, Excel teaches selecting a cell to become active) and *a display event* (pages 667-668, Excel teaches using

Art Unit: 2176

tracer arrows to connect related cells, which shows the flow of data from one cell to another). However, Excel does not teach wherein *the focus of attention is located on a first display and the display event is located on a second display*. Grudin teaches using multiple integrated displays to present information (page 459 “Dual or multiple monitors”).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the display event and focus of attention of Excel with the multiple displays of Grudin to allow the system to present information across much wider visual angles than before and to provide abundant display space as disclosed by Tan (page 1 “Introduction”).

**9. Claims 24, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as modified by Grudin further in view of Tan et al. (Effects of Visual Separation and Physical Discontinuities when Distributing Information across Multiple Displays, 2003, *motivational purposes only*), hereinafter “Tan”.**

**As to dependent claim 24**, Excel teaches *a focus of attention* (page 669, Excel teaches selecting a cell to become active) and *a display event* (pages 667-668, Excel teaches using tracer arrows to connect related cells, which shows the flow of data from one cell to another). However, Excel does not teach wherein *the focus of attention is located on a first display and the display event is located on a second display*. Grudin teaches using multiple integrated displays to present information (page 459 “Dual or multiple monitors”).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the display event and focus of attention of Excel with the multiple displays of

Grudin to allow the system to present information across much wider visual angels than before and to provide abundant display space as disclosed by Tan (page 1 “Introduction”).

**As to dependent claim 26**, Excel as modified by Grudin in further view of Tan teaches wherein *the distance between the focus of attention and the display event are displayed on multiple screens*. Grudin further teaches one *non-sensible portion*.

**As to dependent claim 29**, Excel teaches *a focus of attention* (page 669, Excel teaches selecting a cell to become active) and *a display event* (pages 667-668, Excel teaches using tracer arrows to connect related cells, which shows the flow of data from one cell to another). However, Excel does not teach wherein *the focus of attention is located on a first display and the display event is located on a second display*. Grudin teaches using multiple integrated displays to present information (page 459 “Dual or multiple monitors”).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the display event and focus of attention of Excel with the multiple displays of Grudin to allow the system to present information across much wider visual angels than before and to provide abundant display space as disclosed by Tan (page 1 “Introduction”).

*Response to Arguments*

10. Applicant's arguments filed 05/21/2007 have been fully considered but they are not persuasive.

Applicant asserts that Excel does not teach the limitation “such that different types of attention shifting display elements are determined for different differences”. In particular the Applicant asserts that Excel only teaches one attention shifting display element (i.e. the arrows).

The Examiner respectfully disagrees.

While Excel teaches arrows as attention shifting display element, he describes more than one type of arrow, which constitutes multiple elements. Referring back to paragraph [0030] of Applicant's specification, attention shifting display element may include fovea sensitive color changes to indicate inter-relationships. Page 669 of Excel teaches different arrows, attention shifting display elements, include a solid blue arrow, a solid red arrow, and dashed black arrow with an icon, which one skilled can see as being visually different. Page 671, Fig 4 of Excel further shows an additional attention shifting display element (three light lines) to shift a users attention. Therefore Excel teaches having multiple attention shifting display elements, which are determined for different distances.

The rejection of claims as previously addressed stands in further view of the Examiner's Response to Applicant's arguments.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea N. Long whose telephone number is 571-270-1055. The examiner can normally be reached on Mon - Thurs 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2176

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrea Long  
07/28/2007

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**